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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,902	12/02/2003	Shinichi Gayama	041514-5315	2419

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WASHINGTON, DC 20005-1209

EXAMINER
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WARREN, DAVID S

ART UNIT	PAPER NUMBER
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2837

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/724,902	<b>Applicant(s)</b> GAYAMA, SHINICHI	
	<b>Examiner</b> David S. Warren	<b>Art Unit</b> 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 6-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 6-8 and 11-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As per MPEP 2106 (IV)(B)(1)(a), the claims must positively recite a "computer-readable medium" and not merely a computer program per se. For the Applicant's convenience, the appropriate section of the MPEP is as follows:

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, **without the computer-readable medium** needed to realize the computer program's functionality, as **nonstatutory functional descriptive material**. [Emphasis added].

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinstock (6,166,314) in view of Suzuki et al. (5,347,083).

Regarding claims 1, 9, and 10, Weinstock discloses the use of a storing device for storing a first chord progression (406, fig. 4; col. 6, lines 31 – 36), a searching data producing device - as stated supra, the Applicant has defined “searching” device as a data input device (see performance input device of figs. 1A and 1B), a comparator for comparing chord progressions (206, fig. 2) on the basis of changed root and attribute (see 504, 506, of fig. 5), and an output device (output stream, element 18, figs. 1A and 1B). However, Weinstock does not disclose the use of searching nor comparing a specific chord progression (Applicant’s “second chord progression”) against a “plurality of music pieces.” However, Weinstock does disclose the need to search within a single music piece for a known chord progression (col. 1, lines 52 – 54). Suzuki discloses a means to search a plurality of chord progressions for a specific chord progression.

Suzuki states (col. 11, lines 35 - 45):

FIG. 6 illustrates the detail of the chord matching process of step 54 of FIG. 5. The chord matching process is designed for sequentially comparing the chord data of the input music piece and the respective chord data of the 20 music pieces stored in the chord performance memory 5 and for then setting "1" into the coincidence flag MCH(i) that corresponds to the stored music piece whose chord progression is determined as not matching or coinciding with that of the input music piece.

It would have been obvious to one of ordinary skill in the art to combine the teachings of Weinstock and Suzuki to obtain a music comparing system to thereby compare (and search for) a given input chord progression within and among a plurality of chord progressions. The motivation for making this combination would be to allow a user to use

the Weinstock invention to load and practice an entire repertoire instead of having to load each piece individually. Regarding claim 2, Weinstock discloses the use of a comparator changing positions (408, fig. 4; 604, fig. 6, changing measure and beat is deemed to be synonymous with changing position; col. 8, paragraph 5).

#### ***Allowable Subject Matter***

4. Claims 6 – 8 and 11 – 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

5. Applicant's arguments, filed July 7, 2006, with respect to the rejection(s) of claim(s) 1 - 10 under §102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Suzuki who specifically shows searching for a given chord progression among plural chord progressions.

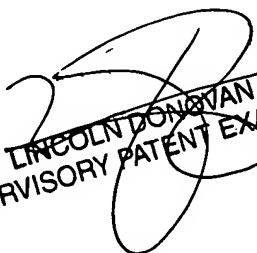
***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Warren whose telephone number is 571-272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2837. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dsw

  
LINCOLN DONOVAN  
SUPERVISORY PATENT EXAMINER